

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
27 January 2005 (27.01.2005)

PCT

(10) International Publication Number
WO 2005/008192 A1

- (51) International Patent Classification⁷: **G01G 19/30, B07C 5/18**
- (21) International Application Number: **PCT/IS2004/000009**
- (22) International Filing Date: **16 July 2004 (16.07.2004)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data:
60/487,599 17 July 2003 (17.07.2003) US
6878 17 July 2003 (17.07.2003) IS
- (71) Applicant (*for all designated States except US*): **MAREL HF. [IS/IS]; Austurhrauni 9, IS-210 Gardabaer (IS).**
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **GUDJONSSON, Petur [IS/IS]; Brunalandi 8, IS-108 Reykjavik (IS). ROGNVALDSSON, Magnus H. [IS/IS]; Austurbrun 4, IS-108 Reykjavik (IS). THORSSON, Brynjulfur [IS/IS]; Kvistlandi 20, IS-108 Reykjavik (IS).**
- (74) Agent: **A & P ARNASON; Efstaleiti 5, IS-103 Reykjavik (IS).**
- (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, IU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PI, PL, PT, RO, RU, SC, SD, SE, SG, SK, SI, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

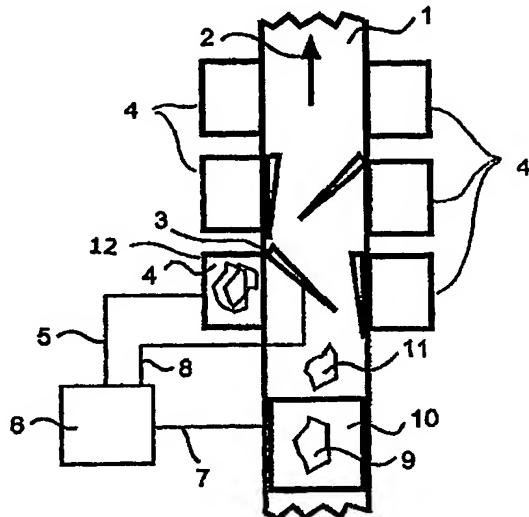
— *of inventorship (Rule 4.17(iv)) for US only*

Published:

— *with international search report*

[Continued on next page]

(54) Title: **A METHOD AND SYSTEM FOR BATCHING ITEMS INTO RECEPTACLES**



WO 2005/008192 A1

(57) Abstract: The present invention relates to a method and an apparatus for batching items (9) on non-uniform weight into batches fulfilling certain weight criteria. Items (9) are conveyed on a dynamic scale (10) registering the individual weight of items (9) and subsequently the items are combined into batches. Statistical methods are used to obtain minimum overweight or underweight in relation to the weight criterial. The invention further relates to a method and an apparatus which is capable of determining the weight of each item (9) and the weight of each batch with increased precision and minimizing the overweight or underweight of the batch.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.